

Stakeholder Engagement in PES Research

Task 3 Update to the Vermont PES Working Group

Alissa White & Nour El-Naboulsi

April 5th, 2022



THE UNIVERSITY OF VERMONT
EXTENSION

Task 3: Stakeholder engagement & contingent valuation

Farmers

- Focus Groups
- Survey
- Interviews

Farm Advisors

- Focus Groups

Engaging farmers in Vermont on PES and meaningful compensation

Phase 1: Farmer Focus Group

- January 2022
- Input on survey development, program design & alternative forms of compensation

Phase 2: Survey

- February & March 2022
- Questions about compensation, conservation practice, ecosystem services and farm

Phase 3: Interviews

- March & April 2022
- Conversations about meaningful compensation and performance-based programs

Farmer Focus Groups & Interviews

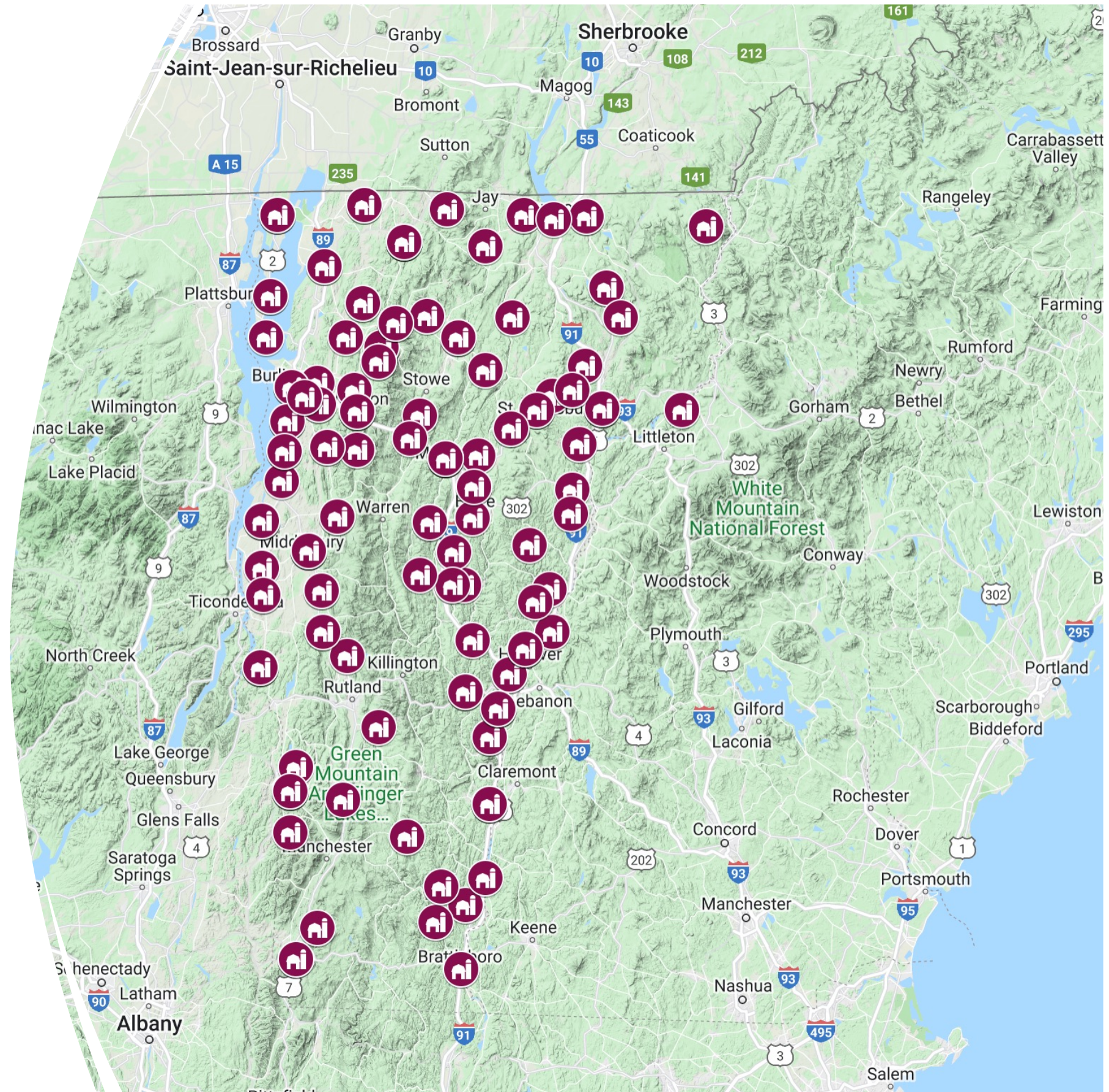


Important themes about program design:

- Compensation needs to be “worth it”
- Different kinds of burden can deter participation
 - Enrollment paperwork and data reporting
 - Cost of management changes & farm activities
 - Distrust of government
- Value comes in many forms of compensation
 - Monetary payments offset costs
 - Learning & technical assistance
 - Soil health & future benefit to productivity
 - Information & data

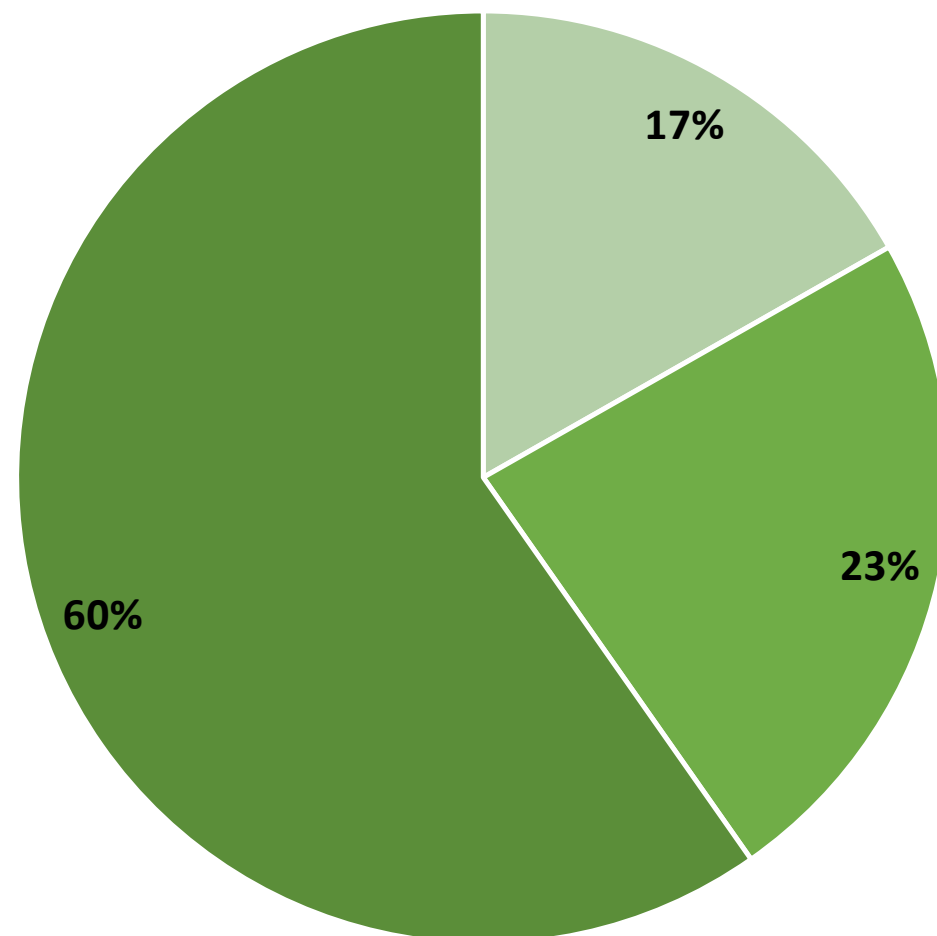
Vermont Farmer Ecosystem Services and Conservation Survey

- **Collaboratively developed** over 3 months
- Circulated via farm organizations, key contacts, communication networks & media by PES Working Group
- February – April 2021
- **163** valid responses to date
- **140** farmers filled out most of the questions
- Median duration of time to complete the survey was **29 minutes**
- \$25 compensation



Farmer Survey Insights

Preference for **Reduced Enrollment Burden** vs Privacy

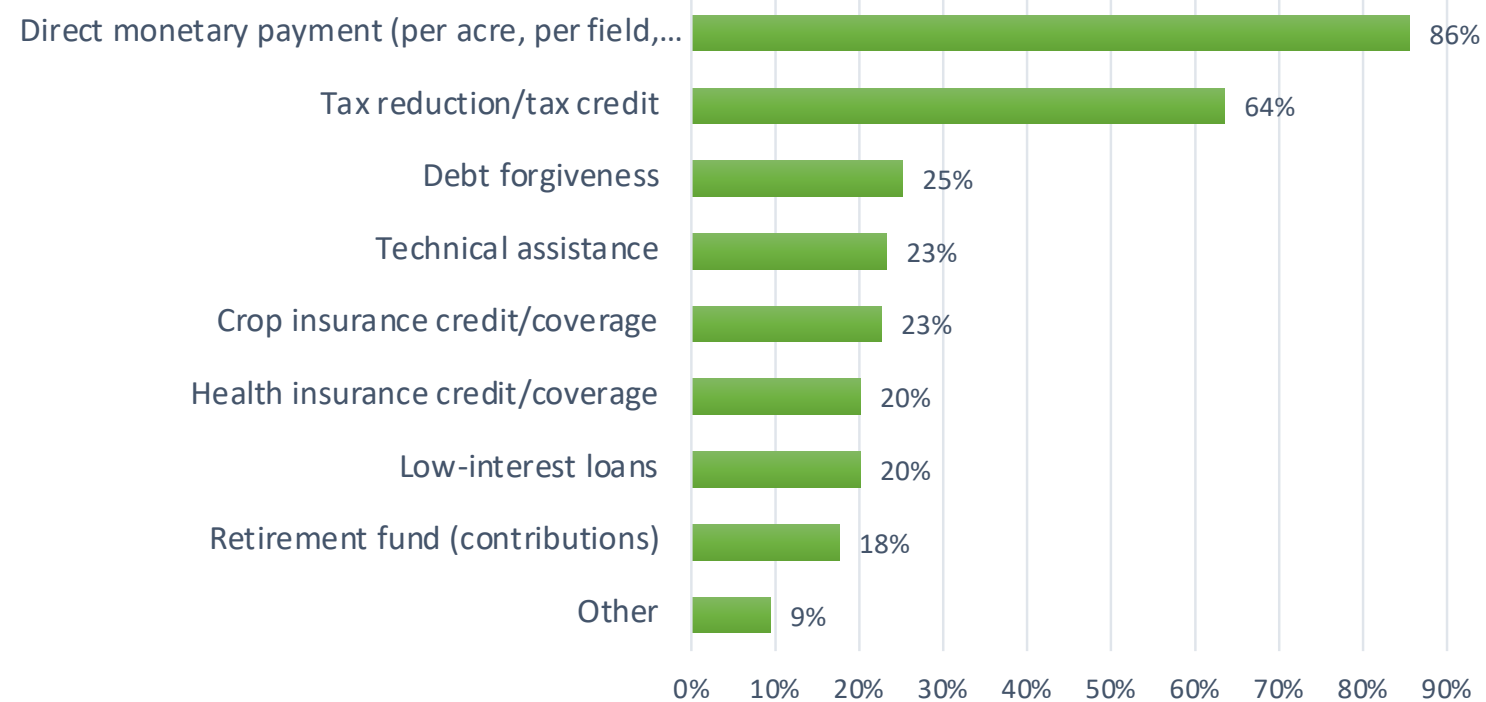


- My data privacy is important and enrollment paperwork should not be shared between programs.
- Neither is more important to me
- The application for new conservation incentive programs should be combined with existing conservation incentive program paperwork as much as possible to save me time.

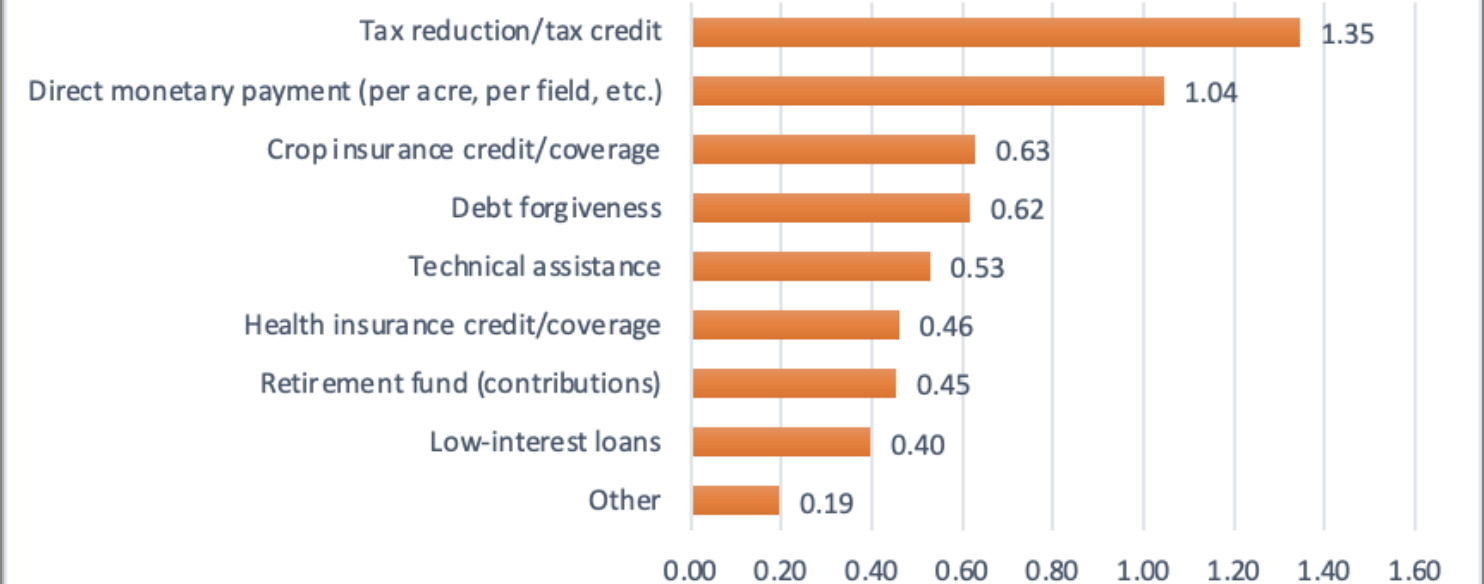
Farmer Survey Insights

- **86%** of farmers ranked **direct monetary payment** in their top 3 preferred forms of compensation
- **Tax reduction or tax credit** had the highest average rank of all options

'Please rank the top three forms of payment or compensation you would accept for increasing or sustaining soil health. '

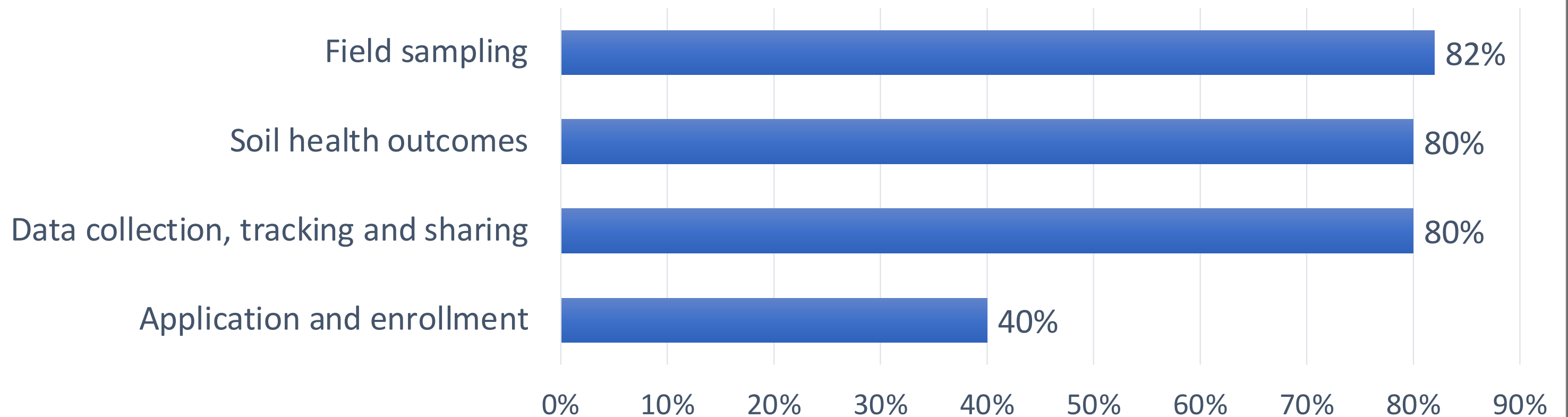


Average rank of preferred forms of compensation



Farmer Survey Insights

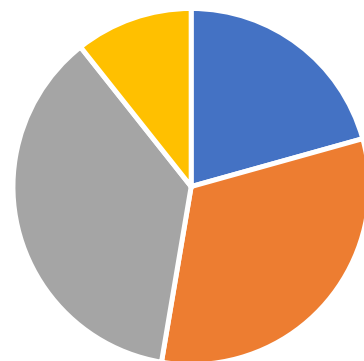
Which aspects of the program should you be compensated for?



Farmer Survey Insights

- **40%** of farmers felt they should be compensated for the **burden of enrollment** associated with a new PES program
- **80%** of farmers felt they should be compensated for the **burden of data collection, tracking and sharing** associated with a new PES program
- Most farmers estimated it would take a few days to collect that data
- Farmers were asked to estimate a fair hourly rate for this activity. The median rate was \$25/hour
- Based on this data, we estimate enrollment compensation at **\$800 per farm** would incentivize participants who were deterred by perceived enrollment and reporting burden.

Approximately how much time do you think it would take you to collect data on your management practices, conservation strategies, soil test results and other areas of your farm operation and report it to a new PES program?



■ Half a day or less ■ A whole day ■ A few days ■ A week or more

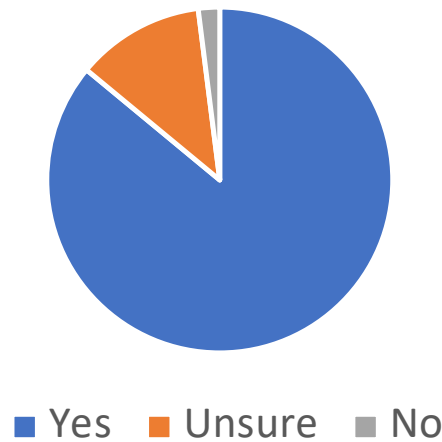
Preferred hourly compensation for collecting and sharing farm management and soil test data:

Low: \$ 0.00
Median: \$ 25.00
Average: \$ 35.00
High: \$ 300.00

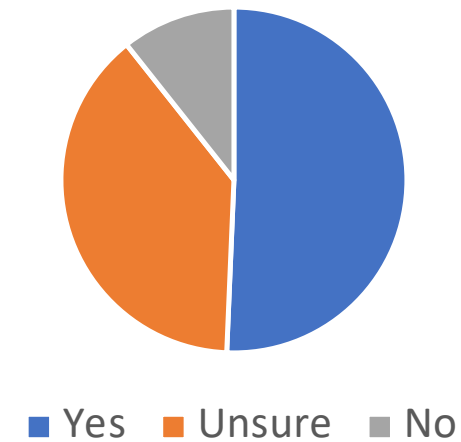
Farmer Survey Insights

- **86%** of farms would allow a 3rd party to conduct advanced soil measurements on their farm.
- **76%** would prefer to receive training to eventually conduct advanced soil testing themselves.

Would you allow a 3rd party to conduct the advanced soil measurements on your farm to participate in a program?

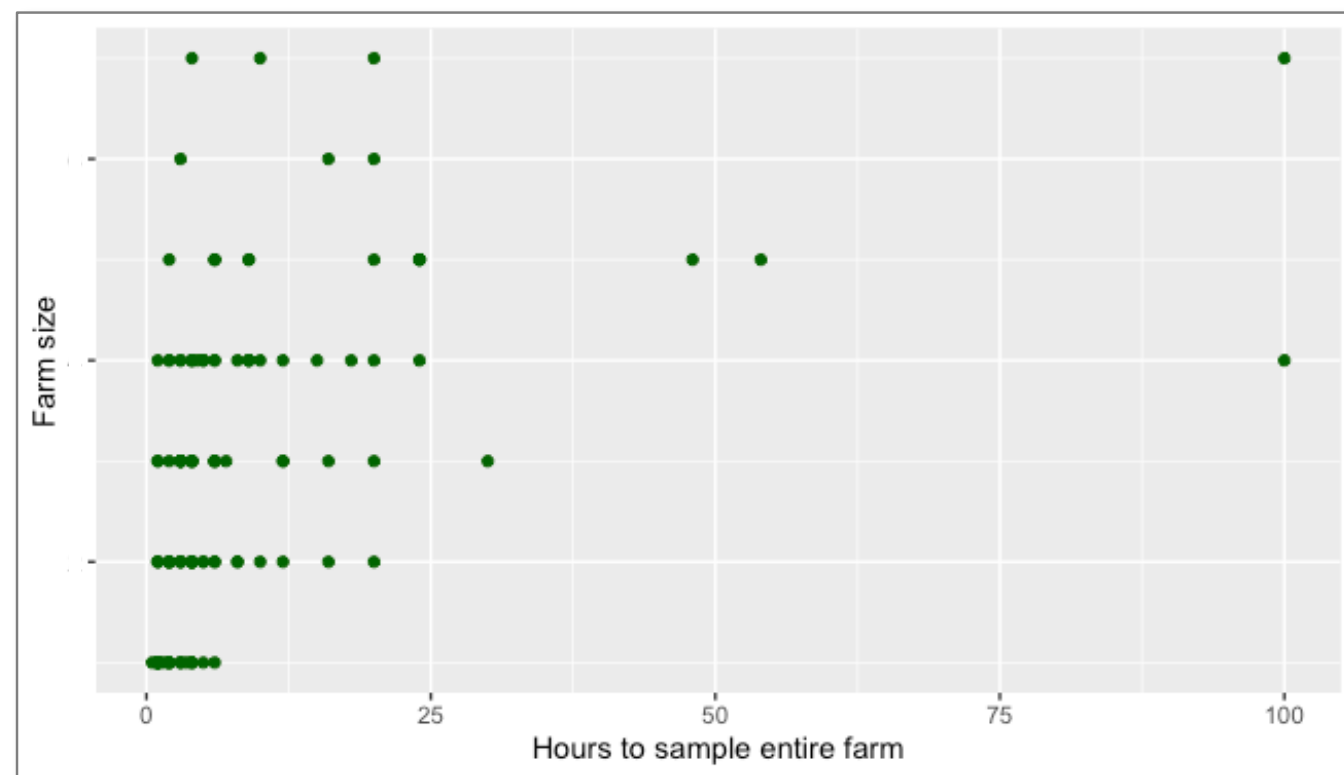


Would you prefer to receive technical assistance so that you may eventually conduct these soil measurements yourself?



Farmer Survey Insights

- **82%** of farmers felt they should be compensated for the **burden of soil sampling** associated with a new PES program
- Most farmers estimated it would take a **2 – 9 hours** to collect basic soil samples from all of their fields.
- Farmer were asked to estimate a fair hourly rate for this activity. The median rate was **\$25/hour**
- Based on this data, we estimate compensation at **\$225 per farm** would incentivize most participants who were deterred by the burden of basic soil sampling.
- However, for larger farms this activity could take up to 50 or 100 hours, and may require greater compensation to incentivize participation.



Preferred hourly compensation for conducting basic soil sampling:

Low: \$ 0.00

Median: \$ 25.00

Average: \$ 32.00

High: \$ 120.00

Preferred hourly compensation for conducting advanced soil sampling:

Low: \$ 0.00

Median: \$ 30.00

Average: \$ 37.00

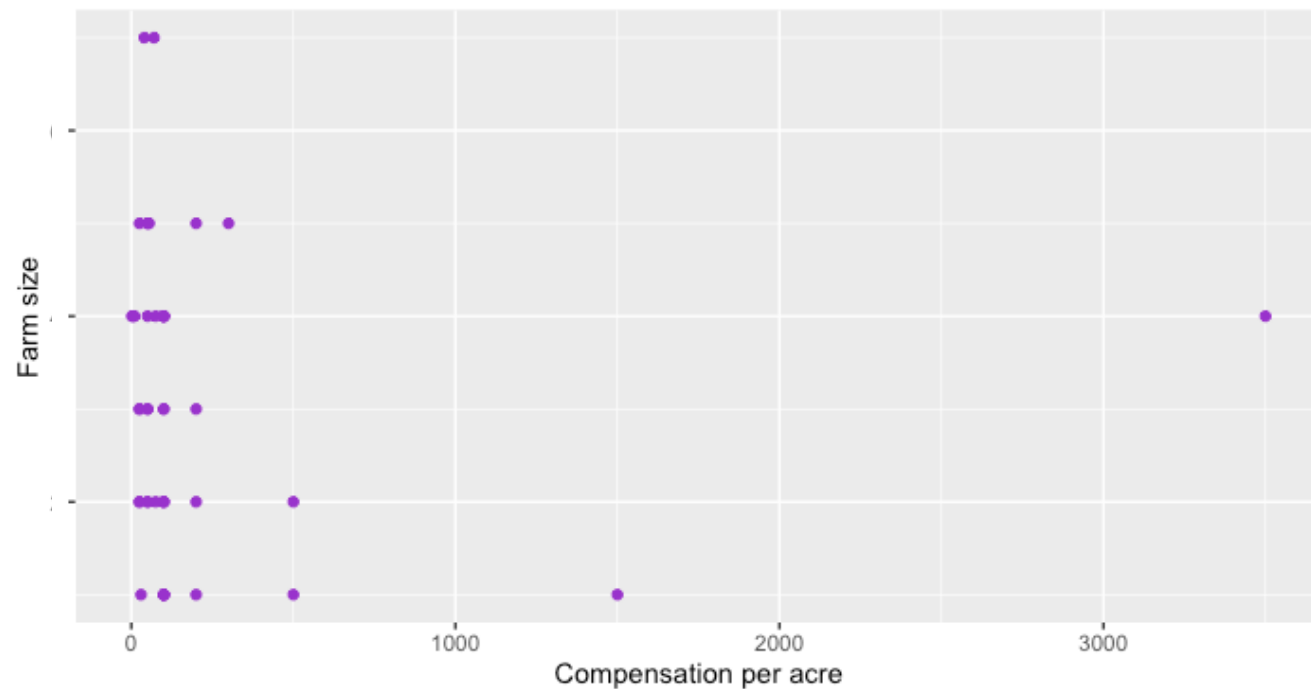
High: \$ 2000.00

Farmer Survey Insights

“If a program compensated you based on how your soil test results compared to soil health threshold goals set by the program, how much do you believe you should be compensated for meeting those goals?”

... We understand this is a complex question with many factors. This question will be explored in more depth during follow up focus groups and interviews.”

- **76%** would prefer to receive training to eventually conduct advanced soil testing themselves.



Preferred compensation per acre:

Low: \$ 0.00
Median: \$ 100.00
Average: \$ 210.00
High: \$ 3,500.00

Preferred compensation whole farm:

Low: \$ 50.00
Median: \$ 800.00
Average: \$ 5,173.00
High: \$ 50,000.00

Farmer Interviews

Topics

- Administrative burden
- Compensation for maintaining high soil health
- Compensation for enhanced soil health
- Compatibility with existing programs/practice-based payments (enrollment, “stacking” approach, etc.)
- Compensation structures
- Value of “good PR”
- Universal basic income

Farmer Interviews

Emerging themes

- Administrative work strongly influences farmers' decision to participate in programs.
- Farmers are largely resistant to the idea of being paid for maintaining soil health.
 - Instead, strongly in favor of access to more in-depth soil health testing, individualized planning with TSPs, and insight/collaboration with other farmers.
- When thinking about *enhancing* soil health, farmers are somewhat more easily able to generate dollar values/select prompted dollar values.
 - Largely use cost of new equipment, practices, land taken out of production for their calculations.

Farmer Interviews

Emerging themes (cont.)

- Farmers largely support the idea of co-eligibility, qualified enrollment, data transferring, etc. between. Also largely support “stacking” performance-based compensation on top of practice-based compensation and vice versa.
- Strong support for tiered-approach, mixed opinions on per acre vs. field vs. farm that needs further analysis.
- Most farmers find value in “good PR” for their farm through potential participation in a PES program.
- Mixed opinions on universal basic income that needs further analysis.

Potential Tier Design

Tier 1

- Advanced soil testing, TA & farmer research network

Tier 2

- Certification, advanced soil testing, TA, farmer research network

Tier 3

- Monetary performance payment level 1, Certification, advanced soil testing, TA & farmer research network

Putting some things together based on our research

Farmer compensation & Program costs

- **Farmer compensation package**
 - **Financial**
 - Enrollment and data reporting burden: ~ \$800 per farm
 - Basic soil sampling: ~ \$225 per farm
 - Performance payment options:
 - ~ \$40/acre (Task 5 report), Or
 - ~ \$150/acre (Task 3 PES survey), Or
 - At least \$800 to \$5,000 per farm (Task 3 PES survey)
 - Complements practice-based cost share programs
 - **Information & learning**
 - Contextualized soil health data
 - Planning support
 - Facilitated education
 - **Marketing & reputation**
 - Certification
- **Additional costs to program**
 - Advanced soil sampling & lab analyses: \$60 to \$200 per field
 - Program admin (AAFM)
 - Technical advising & research network facilitation (partner organizations)

Farmer Interviews

Other themes of interest

- Rewarding farmers for protecting/not farming critical habitats such as wetlands.
- Future of farming in VT.
- Hesitations with using soil measurements as basis for compensation.
- Small and/or vegetable farmers role in this line of work.
- Alternative forms of compensation.
- Past and current frustrations/positive experiences with existing programs, grants, etc.
- Current use exemption

Thank you!
Alissa.White@uvm.edu
Nour.El-Naboulsi@uvm.edu



THE UNIVERSITY OF VERMONT
EXTENSION